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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,689	03/26/2001	Byung-jo Lee	AB-1129 US	9956

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EXAMINER

SNIDER, THERESA T

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 09/11/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/818,689	LEE, BYUNG-JO	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

✓ 1. Acknowledgment is made of applicant's claim for foreign priority based on an applications filed in the Republic of Korea on 3/28/2000, two on 10/27/ 2000 and 2/27/2001. It is noted, however, that applicant has not filed a certified copy of the Korean application as required by 35 U.S.C. 119(b).

Drawings

✓ 2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 40(page 6, line 25 and page 8, line 8, NOT in figures 5-7, as disclosed) and 42(page 6, line 25, NOT in figures 5-6 as disclosed). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

Exemplary of such:

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✓ Page 5, line 5, it is unclear as to what is meant by 'on-off controlled';

✓ Line 7, 'an' should be inserted after 'supplying';

✓ Line 9, it is unclear as to what is meant by 'in near to'.

✓ Page 6, line 1, 'are passed' should be replaced with 'pass';

✓ Line 3, 'connected' should be replaced with 'connect';

✓ Line 8, 'Here, for' should be replaced with 'For';

✓ Line 8, 'the cleaning' should be replaced with 'a cleaning';

✓ Line 9, 'in the' should be replaced with 'in';

✓ Line 10, 'direction' should be replaced with 'directions';

✓ Line 14, it is unclear as to what is meant by 'undesignated' reference numeral;

✓ Line 24, 'a' (both occurrences) should be deleted;

✓ Page 7, line 3, 'engaged' should be replaced with 'engage';

✓ Line 13, 'in the' and 'shape' should be deleted;

✓ Line 14, it is unclear as to what is meant by 'for a relative movement';

✓ Line 16 (and occurrences thereafter), it is unclear as to what is meant by 'in a key

way';

✓ Page 8, line 2, connecting 51 to what?

✓ Line 7, 'including a' should be replaced with 'including'.

✓ Page 9, line 21, 'is for' should be deleted;

✓ Line 21, 'supporting' should be replaced with 'support'.

✓ Page 10, line 5, 'is' should be replaced with 'are';

Line 6, 'a' should be inserted after 'have';

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✓ Line 6, it is unclear as to what is meant by 'non-circular section';

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

✓ Claim 1, it is unclear as to what is being claimed. Does one intend for the elements prior to 'the apparatus comprising' to be included in the invention or are they merely 'background information'? All elements crucial to the device should be included after 'comprising';

Line 4, it is unclear as to what is meant by 'a driving portion'; driving what?

✓ Line 7, it is unclear as to what is meant by 'floor cloth cleaning';

✓ Line 8, it is unclear as to what is meant by 'on-off controlled';

✓ Line 9, 'for rotating' should be replaced with 'to rotate';

✓ Line 9, it is unclear as to what is meant by 'an on-state'.

✓ Claim 2, line 2, 'separate' from what?

✓ Claim 3, line 2, are there 'a pair' on 'both' sides or a pair, one of the pair on each side?

✓ Claim 4, line 2, it is unclear as to what is meant by 'for being rotated';

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Lines 4-5, it is unclear as to how a 'force' can be converted to a 'direction'.

✓ Claim 6, line 2, it is unclear as to what is meant by 'for being rotated'.

✓ Claim 7, line 1, 'a' should be deleted;

✓ Line 5, it is unclear as to what is meant by 'in a key way'.

✓ Claim 9, line 1, 'each of the worm members' lacks proper antecedent basis.

✓ Claim 10, line 1, 'a' should be deleted.

✓ Claims 12-14, line 1, 'the threads' lacks proper antecedent basis.

✓ Claim 14, line 2, 'the worm gear members'(plural) lacks proper antecedent basis.

Claim 16, line 2, 'the transmission gears' lacks proper antecedent basis;

✓ Line 3, 'the rotary members'(plural) lacks proper antecedent basis;

✓ Line 4, 'the worm gear members' lacks proper antecedent basis.

Is the dependence incorrect?

✓ Claim 17, line 2, 'the floor cloth' has not been previously positively recited in the claims.

Therefore, it is unclear as to what is being claimed.

✓ Claims 18-19, line 2, 'the rotary members'(plural) lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dutcher.

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Dutcher discloses a rotary member disposed on a lower end of a suction assembly (fig. 1, #12).

Dutcher discloses a rotary driving means (col. 2, lines 39-41).

Dutcher discloses a power supplying means for connection between a driving switch and the driving means (col. 2, lines 41-51).

9. Claim 1-2 and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jones et al..

Jones et al. discloses a rotary member disposed on a lower end of a suction assembly (fig. 3, #30).

Jones et al. discloses a rotary driving means (fig. 4, #44).

Jones et al. discloses a power supplying means for connection between a driving switch and the driving means (col. 4, lines 11-16 and 29-32).

With respect to claim 2, Jones et al. discloses the power supply means being disposed in a separate space with a protective cover for housing power terminals (figs. 1-2, #20,22).

With respect to claim 15, Jones et al. discloses a casing member formed in the suction assembly (fig. 3, #29).

10. Claim 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Burgoon.

Burgoon discloses a rotary member disposed on a lower end of a suction assembly (fig. 1, #56,58).

Burgoon discloses a rotary driving means (fig. 2, #60).

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Burgoon discloses a power supplying means for connection between a driving switch and the driving means (col. 2, lines 13-19).

With respect to claim 2, Jones et al. discloses the power supply means being disposed in a separate space with a protective cover for housing power terminals (figs. 1-2, #20,22).

Allowable Subject Matter

11. Claims 3-14, 16 and 17-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses floor cleaners having rotary members operated by a driving means that is activated through a handle switch HOWEVER fails to disclose or fairly suggest the driving means including a bi-directional rotary motor having a pair of rotary shaft portions formed on both sides and simultaneously rotated and a power transmission unit disposed for transmitting driving force of the shaft portions to the rotary member OR having means for removable supporting a material on the rotary member.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Getz et al. discloses a vacuum cleaner having a handle-operated switch. Hefter discloses a vacuum device with two rotary brushes. Todd et al. discloses a floor cleaner having a rotary brush. Madru et al. discloses a floor cleaner having a motor with shafts extending out

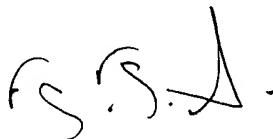
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opposite sides. Glenn, III et al., Werner et al., Komatsu et al. and Neroni et al. disclose vacuum cleaners having a rotary member activated through a handle operated switch. Moorhead and Riebel, Jr. et al. disclose floor cleaners having rotary members with drive motors connected thereto by way of gears and threads.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (703) 305-0554. The examiner can normally be reached on Monday-Wednesday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 879-9310 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Theresa T. Snider
Examiner
Art Unit 1744

TTS
September 9, 2002